REMARKS

Status of Claims

The Office Action mailed January 10, 2005 has been reviewed and the comments of the Patent and Trademark Office have been considered. Claims 1-37 were pending in the application. Claims 1, 15-17, 30, 31, and 34-37 have been amended, new claims 38-43 have been added and no claims have been cancelled. Therefore, claims 1-43 are pending in the application and are submitted for reconsideration.

This amendment changes and adds claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Examiner Interview on February 24, 2005

Applicants' representatives sincerely thank examiner Cho for the courtesy of a productive interview conducted on February 24, 2005. In the interview, subject matter corresponding to the instant amendments was discussed with the examiner and it was agreed that these amendments distinguished over the art of record for the reasons that are further discussed herein.

Prior Art Rejections

In the Office Action, claims 1-3, 7-13, 15, 34, 35, and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. patent 6,490,459 to Sugaya et al. (hereafter "Sugaya") in view of U.S. patent 6,535,498 to Larsson et al. (hereafter "Larsson"). Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya in view of Larsson as applied to claim 1 above, and further in view of U.S. patent 6,218,958 to Eichstaedt et al. (hereafter "Eichstaedt"). Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya in view of Larsson as applied to claim 1 above, further in view of Eichstaedt and further in view of U.S. patent 6,717,529 to Belvin et al. (hereafter "Belvin"). Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya in view of Larsson as applied to claim 1 above, and further in view of U.S. patent application publication no. 2002/0065058 to Gatherer et al. (hereafter "Gatherer"). Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya in view of Larsson and further in view of Gatherer. Claims 16-18, 22-28, 30, and 31 are rejected under 35 U.S.C. § 103(a) as

being unpatentable over Sugaya in view of Larsson and further in view of U.S. patent 6,339,745 to Novik (hereafter "Novik"). Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya in view of Larsson and Novik as applied to claim 16 above, and further in view of Eichstaedt. Claims 20 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya as modified by Larsson, Novik as applied to claim 16 above, further in view of Eichstaedt and further in view of Belvin. Claim 29 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya as modified by Larsson and Novik as applied to claim 16 above, and further in view of Gatherer. Claims 32 and 33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sugaya as modified by Larsson and Novik as applied to claim 30 above, and further in view of U.S. patent application publication no. 2003/0190912 to Jampolsky et al. (hereafter "Jampolsky"). Applicants respectfully traverse these rejections, insofar as they may be applied to the pending claims, for at least the following reasons.

Each of the independent claims 1, 16, 30, 34, 36, and 37 recite, *inter alia*, a method (or system/network) that relate to a local cluster of working components of a system monitored by a utility and includes the following features: (1) each working component has a *low power* transceiver unit that communicates with an area control module, (2) wherein each transceiver unit in the local cluster *itself initiates* determination of an initial best path to the area control module *without any prior knowledge of the area control module*. These features are not disclosed by the applied prior art for at least the following reasons.

First, each of the independent claims recite that each transceiver unit *itself initiates determination* of an initial best path to the area control module without *any prior knowledge of the area control module*. That is, as described in the specification at page 26, when a new transceiver module is added it initiates the determination of an initial path by signaling a "new" signal with no identified destination node or address. Rather the new signal is propagated until it reaches the area control module 14 which creates the best path for the new transceiver and updates the best paths for other transceivers. Therefore, this claimed feature recites each new transceiver module itself initiates determination of an initial best path by simply transmitting a "new" signal and without any knowledge of its destination (i.e., the area control module).

In sharp contrast, Larsson discloses a reactive protocol (with no discussion of determination of an initial path) which in all cases sends out a broadcast message to determine a path to an identified destination node. Larsson teaches that once a source node has established a route to a destination node (col. 3, line 23-24) it would be desirable to allow reactive ad-hoc routing protocols to determine whether more optimal routes exist between the source node and the (known) destination node. *See* col. 3, lines 44-47 of Larsson. Therefore, this recited feature is not disclosed or suggested by either Larsson or Sugaya.

Second, with respect to the claimed invention, it should be noted that both Sugaya and Larsson are non-analogous art. One skilled in the art for monitoring systems for utility devices, such as street lighting systems, would not look to solutions in local area networks such as that provided by Sugaya or the wireless piconet solution provided by Larsson. For example, Larsson discloses that a typical piconet connects only eight devices. *See* col. 1, lines 54-56 of Larsson. Such a small number of devices would be completely unsuitable in the context of monitoring street lights where each local cluster may include hundreds or thousands of working components (street lights). In *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.3d 858 (Fed. Cir. 1993), the Federal Circuit stated that reference to a SIMM in an industrial controller was not necessarily in the same field of endeavor as the claimed SIMMs used in a personal computer even though both related to memories. Therefore, Sugaya and Larsson are not proper prior art to be applied to the claimed invention. Of course, as discussed above, even the combination of Sugaya and Larsson does not disclose or suggest all the features recited in the pending application.

Furthermore, none of the other applied references cure the deficiencies of Sugaya and Larsson. Accordingly, the Office Action fails to make a *prima facie* case of obviousness with respect to the pending claims. Specifically, neither Eichstaedt nor Belvin are in an analogous art to Sugaya or Larsson and no proper motivation for their combination is provided in the Office Action. Likewise, the Office Action also appears to piece together other references without proper motivation and appears to be impermissibly using the applicants' own invention as the map to piece together the references. As the Supreme Court has noted in numerous instances such hindsight reconstruction is an improper basis for judging the patentability of these claims. Furthermore, the Federal Circuit has clarified that the mere fact

the references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the *desirability* of the *combination*. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). In this regard, the motivation provided in the Office Action focuses on the advantages of each reference separately but does not provide any motivation that suggests the desirability of the *combination*.

These recited features provide several advantages as discussed, for example, in page 7, lines 1-10. Specifically, the communications from each of the low power transceivers to the area control module is achieved using a number of intermediate transmissions so that the low power transceivers can be used effectively. Furthermore, since each transceiver itself dynamically determines its best path to the area control module, an alternate path can always be dynamically configured even if one or more of the transceivers fail and thereby reliable delivery of messages to the area control module is achieved.

Accordingly, since neither the recited features nor their advantages are disclosed or suggested by the applied prior art, the pending independent claims are patentable over the applied prior art.

The dependent claims are also patentable for at least the same reasons as the respective independent claims on which they ultimately depend. In addition, they recite additional patentable features when considered as a whole.

In view of the foregoing amendments and remarks, applicants believe the application is now in condition for allowance. If there are any questions regarding the application, or if an examiner's amendment would facilitate the allowance of one or more of the claims, the examiner is encouraged to contact the undersigned attorney at the local telephone number below.

Should additional fees be necessary in connection with the filing of this paper, or if a petition for extension of time is required for timely acceptance of same, the Commissioner is hereby authorized to charge deposit account No. 19-0741 for any such fees; and applicants hereby petition for any needed extension of time.

Respectfully submitted,

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